

OIKE

## RAW SEQUENCE LISTING

DATE: 07/30/2001

PATENT APPLICATION: US/09/509,945

TIME: 15:59:23

Input Set : A:\0230-0148P.ST25.txt

Output Set: N:\CRF3\07302001\I509945.raw

GENE

3 &lt;110&gt; APPLICANT: HAMADA, Kazuyuki et al.

5 &lt;120&gt; TITLE OF INVENTION: MUTANT BARNASE GENE AND TRANSGENIC PLANT TRANSFORMED BY SAID

7 &lt;130&gt; FILE REFERENCE: 0230-0148P

9 &lt;140&gt; CURRENT APPLICATION NUMBER: 09/509,945

C--&gt; 10 &lt;141&gt; CURRENT FILING DATE: 2001-04-01

12 &lt;160&gt; NUMBER OF SEQ ID NOS: 7

14 &lt;170&gt; SOFTWARE: PatentIn version 3.1

16 &lt;210&gt; SEQ ID NO: 1

17 &lt;211&gt; LENGTH: 343

18 &lt;212&gt; TYPE: DNA

19 &lt;213&gt; ORGANISM: Bacillus amyloliquefaciens

21 &lt;220&gt; FEATURE:

22 &lt;221&gt; NAME/KEY: misc\_feature

23 &lt;223&gt; OTHER INFORMATION: wild type barnase gene

26 &lt;220&gt; FEATURE:

27 &lt;221&gt; NAME/KEY: CDS

28 &lt;222&gt; LOCATION: (1)..(336)

29 &lt;223&gt; OTHER INFORMATION:

32 &lt;400&gt; SEQUENCE: 1

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35 1 5 10 15

37 aca tat cat aag cta cct gat aat tac att aca aaa tca gaa gca caa 96

38 Thr Tyr His Lys Leu Pro Asp Asn Tyr Ile Thr Lys Ser Glu Ala Gln

39 20 25 30

41 gcc ctg ggc tgg gtg gca tca aaa ggg aac ctt tca gac gtc gct ccg 144

42 Ala Leu Gly Trp Val Ala Ser Lys Gly Asn Leu Ala Asp Val Ala Pro

43 35 40 45

45 ggg aaa agc atc ggc gga gac atc ttc tca aac agg gaa ggc aaa ctg 192

46 Gly Lys Ser Ile Gly Gly Asp Ile Phe Ser Asn Arg Glu Gly Lys Leu

47 50 55 60

49 ccg ggc aaa agc gga cga aca tgg cgt gaa gcg gat att aac tat aca 240

50 Pro Gly Lys Ser Gly Arg Thr Trp Arg Glu Ala Asp Ile Asn Tyr Thr

51 65 70 75 80

53 tca ggc ttc aga aat tca gac cgg att ctt tac tca agc gac tgg ctg 288

54 Ser Gly Phe Arg Asn Ser Asp Arg Ile Leu Tyr Ser Ser Asp Trp Leu

55 85 90 95

57 att tac aaa aca acg gac cat tat cag acc ttt aca aaa atc aga taa 336

58 Ile Tyr Lys Thr Thr Asp His Tyr Gln Thr Phe Thr Lys Ile Arg

59 100 105 110

61 ggtaacc 343

64 &lt;210&gt; SEQ ID NO: 2

65 &lt;211&gt; LENGTH: 111

66 &lt;212&gt; TYPE: PRT

67 &lt;213&gt; ORGANISM: Bacillus amyloliquefaciens

69 &lt;220&gt; FEATURE:

70 &lt;221&gt; NAME/KEY: misc\_feature

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71 &lt;223&gt; OTHER INFORMATION: wild type barnase gene

73 &lt;400&gt; SEQUENCE: 2

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80          20          25          30
83 Ala Leu Gly Trp Val Ala Ser Lys Gly Asn Leu Ala Asp Val Ala Pro
84          35          40          45
87 Gly Lys Ser Ile Gly Gly Asp Ile Phe Ser Asn Arg Glu Gly Lys Leu
88          50          55          60
91 Pro Gly Lys Ser Gly Arg Thr Trp Arg Glu Ala Asp Ile Asn Tyr Thr
92 65          70          75          80
95 Ser Gly Phe Arg Asn Ser Asp Arg Ile Leu Tyr Ser Ser Asp Trp Leu
96          85          90          95
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103 &lt;210&gt; SEQ ID NO: 3

104 &lt;211&gt; LENGTH: 342

105 &lt;212&gt; TYPE: DNA

106 &lt;213&gt; ORGANISM: Artificial Sequence

108 &lt;220&gt; FEATURE:

109 <223> OTHER INFORMATION: A mutant barnase gene derived from *Bacillus amyloliquefaciens*

111 &lt;400&gt; SEQUENCE: 3

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116 agggaacctt gcagacgtcg ctccggggaa aagcatcggc ggagacatct tctcaaacag 180
118 ggaaggcaaa ctccggggca aaagcggacg aacatggcgt gaagcggata ttaactatac 240
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125 &lt;210&gt; SEQ ID NO: 4

126 &lt;211&gt; LENGTH: 6548

127 &lt;212&gt; TYPE: DNA

128 <213> ORGANISM: *Escherichia coli* LE392

130 &lt;220&gt; FEATURE:

131 &lt;221&gt; NAME/KEY: misc\_feature

132 &lt;223&gt; OTHER INFORMATION: Clone: pTS172

135 &lt;400&gt; SEQUENCE: 4

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140 cttcaataat attgaaaaag gaagagtatg agtattcaac atttccgtgt cgcccttatt 180
142 cccttttttg cggcattttg ccttctgttt tttgctcacc cagaaacgct ggtgaaagta 240
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148 gttctgctat gtggcgcggt attatccggt attgacgcgc ggcaagagca actcggtcgc 420
150 cgcatacact attctcagaa tgacttggtt gactactcac cagtcacaga aaagcatctt 480
152 acggatggca tgacagtaag agaattatgc agtgctgcca taaccatgag tgataaacact 540
154 gcggccaact tactctgac aacgatcgga ggaccgaagg agctaaccgc ttttttgcac 600
156 aacatggggg atcatgtaac tcgccttgat cgttgggaac cggagctgaa tgaagccata 660
158 ccaaacgacg agcgtgacac cacgatgcct gtagcaatgg caacaacggt gcgcaaaacta 720

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164	aaatctggag	ccggtgagcg	tgggtctcgc	ggtatcattg	cagcactggg	gccagatggg	900
166	aagccctccc	gtatcgtagt	tatctacacg	acggggagtc	aggcaactat	ggatgaacga	960
168	aatagacaga	tcgctgagat	aggtgcctca	ctgattaagc	attggtaact	gtcagaccaa	1020
170	gtttactcat	atatacttta	gattgattta	aaacttcatt	tttaatttaa	aaggatctag	1080
172	gtgaagatcc	tttttggtc	gagtcctcat	accaaaatcc	cttaacgtga	gttttcgttc	1140
174	cactgagcgt	cagaccccg	agaaaagatc	aaaggatctt	cttgagatcc	ttttttctg	1200
176	cgcgtaatct	gctgcttgca	aacaaaaaaa	ccaccgctac	cagcggtggt	ttgtttgccc	1260
178	gatcaagagc	taccaactct	ttttccgaag	gtaactggct	tcagcagagc	gcagatacca	1320
180	aatactgtcc	ttctagtgt	gccgtagtta	ggccaccact	tcaagaactc	tgtagcaccg	1380
182	cctacatacc	tcgctctgct	aatcctgtta	ccagtggctg	ctgccagtgg	cgataagtcg	1440
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188	ctacagcgtg	agcattgaga	aagcgccacg	cttcccgaag	ggagaaaggc	ggacagggtat	1620
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206	tgtataattg	cgggactcta	atcataaaaa	cccatctcat	aaataacgtc	atgcattaca	2160
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256	aatataattc	cgctcctttg	ccagattgcc	attcttgcca	tgcttgatgat	cttcatttgg	3660

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262	caact	aactg	tttcc	gaatt	tcagg	gcccc	tcca	aggatc	ccaga	aatca	tcatct	ctga		3840	
264	acatg	ccttc	agagaa	atgg	cattg	accgt	ccatt	acaaa	ctaac	gtaca	ctgtat	ctgt		3900	
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357 <210> SEQ ID NO: 5
358 <211> LENGTH: 6539
359 <212> TYPE: DNA
360 <213> ORGANISM: Escherichia coli LE392
362 <220> FEATURE:
363 <221> NAME/KEY: misc_feature
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372 cttcaataat attgaaaaag gaagagtatg agtattcaac atttccgtgt cgcccttatt      180
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396 aaatctggag ccggtgagcg tgggtctcgc ggtatcattg cagcactggg gccagatggg      900
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430 gataaccgta ttaccgcctt tgagtgaagt gataccgctc gccgcagccg aacgaccgag      1920
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442 ttcaatctta agaaacttta ttgcaaatg tttgaacgat ctgcttcgga tcctctagat      2280
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446 agtaaagaat ccggtctgaa tttctgaagc ctgatgtata gttaatatcc gcttcacgcc      2400
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VERIFICATION SUMMARY

PATENT APPLICATION: US/09/509,945

DATE: 07/30/2001

TIME: 15:59:24

Input Set : A:\0230-0148P.ST25.txt

Output Set: N:\CRF3\07302001\I509945.raw

L:10 M:271 C: Current Filing Date differs, Replaced Current Filing Date